PROVIDENCE ALASKA
MEDICAL CENTER

PROCEDURE DATE: 06/28/2006

PREOPERATIVE DIAGNOSES:
1. Cervical degenerative disk disease C5-6 and C6-7.
2. Foraminal stenosis, left greater than right, C5-6 and C6-7.
3. Chronic pain.

POSTOPERATIVE DIAGNOSES:
1. Cervical degenerative disk disease C5-6 and C6-7.
2. Foraminal stenosis, left greater than right, C5-6 and C6-7.
3. Chronic pain.

PROCEDURE:
1. Anterior cervical decompression and foraminotomies at C5-6 and C6-7.
2. Anterior interbody fusion C5-6 and C6-7.
3. Anterior allograft cage placement with some local autograft at C5-6 and C6-7.
4. Anterior plating C5 to C7.
5. Neuromonitoring.

SURGEON: Eule, James

ASSISTANT: Edward Voke, MD.

ANESTHESIA: Trygg Ramstad, MD, with a general endotracheal anesthetic.

COMPONENTS: Medtronic Sofamor Danek Atlantis Vision with the 40-mm plate and five 15-mm screws and one 14-mm screw, a 9-mm Cornerstone bone cage and a 7-mm Cornerstone bone cage.

HISTORY: The patient is a 50-year-old gentleman who has been suffering a long time from significant neck and arm pain, left greater than right. He has undergone extensive conservative treatment without relief of his symptoms. He was counseled as to the risks and benefits of operative and nonoperative intervention. He understood these risks and benefits and desired the procedure done.

PROCEDURE: The patient was taken to the operating room and given a general endotracheal anesthetic. Bilateral TED hose and SCDs were placed on the patient. A Foley catheter was placed in the patient. Neuromonitoring leads were placed on the patient. Ancef 2 g was given to the patient. The patient was placed supine on the operating room table and once asleep placed into the Mayfield head tongs. A baseline neuromonitoring was obtained with good signals. The neck was then prepped and draped in the usual fashion with Betadine solution.

A transverse incision was made on the left side of the neck in a normal anatomic skin crease. Bovie dissection was carried out down through the subcutaneous fat and down through the platysma. This allowed us to identify the medial border of the sternocleidomastoid, which had a large vein on it. We were

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able to take the vein laterally with the sternocleidomastoid and dissect down in the intramuscular planes, taking the carotid sheath laterally and the esophagus and trachea medially, exposing the prevertebral fascia. The prevertebral fascia was split and we were able to expose the disk space and placed a needle into the disk space and took a cross table lateral x-ray to confirm our position at C5-6. We then marked that with the Bovie and freed up the longus colli from C5 to C7 on either side and placed self-retaining retractors over the C6-7 disk space. We then placed Caspar pins into the C6 and C7 vertebral body and distracted across it and incised the annulus. Then the microscope was brought in and, using the microscope, we were able to carefully dissect out the disk back to the posterior longitudinal ligament. Then carefully with a microhook we were able to dissect through the posterior longitudinal ligament and then transect it with a #1 Kerrison. With a combination of #1 and #2 Kerrisons, we were able to decompress the spinal cord and thecal sac and the foramen out laterally. We undercut out laterally far enough so that the nerve root probe could be passed out the foramen without any further compression. There were significantly more abnormalities on the left than on the right with more foraminal stenosis and this was more difficult to decompress, particularly at that C6-7 level. Then we used the barrel bur and took off the overhanging of the C6 vertebral body as well as smoothed out the superior endplate of C7. We then used the rasping system and rasped to make sure that the edges were perfectly machined and selected a 9-mm Cornerstone bone cage. On the back table we modified the bone cage and opened up the central portion so that we could place a little more Infuse sponge in there and used two-thirds of an Infuse sponge and packed it inside the cage. The cage was then placed into the C6-7 interspace and tapped into the appropriate position. We then took out the C7 Caspar pin and moved it up into the C5 vertebral body. We repositioned self-retaining retractors and then repeated this process at the C5-6 disk. At this level when we were getting out laterally into the foramen on that left side we did find a free fragment of cartilaginous endplate jammed out into the left foramen. This was removed and then the nerve root was decompressed. We, at this level, once again placed the Cornerstone bone cage. Then we used the Smith-Petersen rongeur to rongeur down the overhanging osteophytes to smooth out the anterior portion of the vertebral bodies. We selected the appropriate length plate, which fit nicely, and then bent some more lordosis into it and held it in position with a stay pin. We then put a single screw in at each level, took a cross table lateral x-ray to confirm proper position and trajectory and length of the screws and then placed our final three screws and repeated the x-ray, confirming the screw length, position and the overall cages and bone graft. We then irrigated out the wounds with copious amounts of saline. The platysma was then loosely closed using 2-0 Vicryl suture and the skin was closed using a 4-0 Monocryl. The skin was dressed with Dermabond, a 4x4 and Tegaderm. The patient was awakened in the operating room and taken to the Post-Anesthesia Care Unit in good condition.

ESTIMATED BLOOD LOSS: 100 mL.

FLUIDS: 2,000 mL of crystalloid.

COMPLICATIONS: None.

DISPOSITION: The patient will be admitted to the hospital for pain control and observation.

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Preliminary Not Authenticated

James M Eule, MD

cc: James M Eule, MD